



ABSTRACT OF THE DISCLOSURE

An optical module may include precise guide pins formed in a transparent substrate or an optical transmission line support member. The precise guide pins may be inserted into corresponding precise guide holes within the transparent substrate or the optical transmission line support member to precisely align optical elements. The precise guide holes may be formed within one of the transparent substrate and the optical transmission line support member by positioning protruding portions of a jig within over-sized guide holes and filling a gap between the protruding portions of the jig and the respective over-sized guide holes with a filler material. Once the filler material is cured, the jig may be withdrawn leaving precisely positioned guide holes. ~~To provide a technology, which enable carrying out an optical position alignment precisely and easily in apparatus and the like used in optical communication, a method of manufacturing an optical module includes forming a guide pin in either a transparent substrate or an optical transmission line support member; forming a guide hole, in which the guide pin is to be inserted, to the other one of the transparent substrate and the optical transmission line support member such that the diameter of the guide hole is made larger as compared with the diameter of the hole; arranging a jig having a protruding portion, of which diameter is substantially the same as the diameter of the guide pin, over the transparent substrate such that the protruding portion is being inserted into the guide hole; filling the gap between the protruding portion and the guide hole with a filler material, which is cured by carrying out a predetermined processing; adjusting a position of the jig; curing the filler material, which is filled in the gap between the protruding portion and the guide pin; and pulling out the protruding portion from the guide hole.~~